

May 22, 2012

Mr. Duane W. Spencer
Field Manager
Bureau of Land Management
Buffalo Field Office
1425 Fort Street
Buffalo, WY 82834-2436

Regarding: Response to Second Completeness Review of Nichols Ranch ISR Project Plan of Operations

Dear Mr. Spencer:

Uranerz received the BLM Buffalo Field Office (BFO) second completeness review for the Nichols Ranch ISR Project Mine Plan of Operations dated April 19, 2011. Uranerz appreciates BLM's timely review and availability for discussion. On April 20, 2012 the BLM, Uranerz and TRC Solutions attended a telephone conference to discuss the comments.

Enclosed are Uranerz responses to the aforementioned comments including response related materials. Two of BLM's comments required changes to a table and exhibit, therefore an Index Sheet has been provided for insertion instruction. Additionally, a CD of this submittal has been included.

If you have any questions regarding the responses, please contact me at 307-265-8900 or by email at: mthomas@uranerz.com

Sincerely,



Mike Thomas
Vice President Environmental, Safety, and Health
Uranerz Energy Corporation

MT/dk

Enclosures

Uranerz Responses (plus Photo pages, Quality Assurance Plan)
Insertion Instructions (for Exhibit D5-b and Table E-1)
CD of Document

USA OPERATIONS

P.O. Box 50850 T: 307 265 8900
1701 East E Street F: 307 265 8904
Casper WY 82605-0850

CANADA OPERATIONS

Suite 1410 T: 604 689 1659
800 West Pender Street F: 604 689 1722
Vancouver BC V6C 2V6

American Stock Exchange: URZ
Toronto Stock Exchange: URZ
Frankfurt Exchange: U9E
www.uranerz.com

2.) Description of Operations:

i. Maps of the project area:

a. Maps should show more precisely where such facilities as header houses, the satellite processing facility, in-field oxygen storage tanks, staging areas, access roads (including those within wellfields), pipelines, overhead power lines, fences, etc., will likely be placed.

Uranerz Response:

Uranerz explained in the first round responses submitted March 16, 2012 that recovery via wellfield installation follows the ore zone. As described in Section 2.0 of the POO, the depth of the ore zone depends on the topography, the changes in the levels of the formation and the stratigraphic horizon. As illustrated in Figure D5 roll front trends are sinuous, they may be a few feet to 500 ft. wide and can be many miles in length. Along the length of the trace of the roll front ore grade uranium may be found; however, ore is not likely along every mile of the front. It is worth noting that the ore zone illustrated in the exhibits is an extrapolation of the ore zone based on the exploration drilling data.

Wellfield production therefore targets the ore zone in the specific areas designated, thereby reducing surface impacts. However, unlike CBM sites, in-situ operations require phased construction. Per discussion with the Buffalo BLM Field Office the sequential phasing of wellfield development includes delineating the ore zone, planning the wellfield layout, and construction and development of the wellfield. While exploration of the Hank Unit ore zone has been completed, the production areas have not yet been delineated. Delineation allows Uranerz to pinpoint the richest ore locations thereby ensuring best well placement for the highest production yield with as small as disturbance possible. Once the ore zone is delineated, the infrastructure (i.e. header houses, staging area, pipelines, power lines, etc.) can start being planned and optimally located. Figure 2, “General Location of Header House Access Road and Adjacent Pipeline, Utility, and Communication Corridor” provided in previous responses dated March 16, 2012, depicted a general layout of the wellfield because as stated, until delineation is complete no linear infrastructure plan can be developed or finalized. To help visualize what a typical ISR operation might appear as, several photos have been included (titled Pictorial Examples of ISR Wellfields and Facilities) with this document. Photo 1 is an aerial view of a portion of an ISR facility showing a satellite type facility structures, access roads, wellfield (including wells and header houses), and electrical lines, etc. Photo 2 also displays an ISR facility similar to Photo 1 less a satellite structure but portrays the wellfield features including head houses, wells, access roads, and electrical lines. Photo 3 is yet another ISR wellfield picture depicting structures like those in Photo 2. Photo 4 represents what a header house structure looks like in a wellfield and Photo 5 again pictures an ISR wellfield and related structures similar to those in the previous photos.

Uranerz had also included in the previous submitted response the number of wells per header house, pipelines, roads etc. as discussed in the Mine Plan of Volume V, Sections 3.3.5 and 3.10.1. Pipeline trenching is also described in Section 3.3.5 such that trenches for pipeline burial will have the top soil removed and stored separately. The subsoil will be placed next to the trench which will be excavated with a backhoe or trenching machine. For example individual trenches will be dug for pipelines from the header house to the well in separate corridors leaving the space between the trenches in place. However, as discussed is the POO once the pipelines are put in the trenches the trenches are backfilled with the subsoil and topsoil replaced which is shortly followed with

seeding to stabilize the soil and re-establish vegetation for the interim of operations.

b. Figure 2, “General Location of Header House Access Road and Adjacent Pipeline, Utility, and Communication Corridor”, does not differentiate the types of linear infrastructure or disturbance areas.

Uranerz Response:

Please refer to Uranerz Response to comment 2(i)(a) above.

c. There are some differences between the March 2012 maps and earlier maps. For example, the Hank Unit satellite processing facility is oriented east-west on the March 2012 map while it was oriented north-south on earlier maps. Are these differences indicating real intended changes to the planned placement of facilities?

Uranerz Response:

As per discussion with the BLM the physical location of the facility in the map remains unchanged from that approved by the NRC and WDEQ-LQD. And as mentioned during the discussions with the BLM, the amount of disturbance required for the Hank Unit satellite processing facility remains the same regardless of orientation. For clarification the satellite facility is located on private surface not on BLM managed surface; however, it is part of the operations process at the Hank Unit.

d. The maps include proposed mining activities within areas where Uranerz has indicated, in Appendix C of the Mine Plan, that it does not have the right to mine. Please revise the maps to reflect actual areas where mining activities will occur based on those areas where Uranerz has secured the right to mine.

Uranerz Response

Uranerz explained to BLM during a telephone conference that the WDEQ-LQD requires that any ‘no right to mine’ within the permit area be included in maps. In areas where there is no right to mine, Uranerz may not install production areas; however, monitor wells for production areas can still be installed.

ii. Preliminary designs:

The height of the header houses and satellite processing facility were not included.

Uranerz Response

The header house height is 10 feet. As described in Section 3.10.3 of the Mine Plan, the satellite processing facility is less than 40 ft. at the eaves.

v. Quality assurance plan:

The quality assurance and control plan is too general. The purpose of the plan is to ensure the safe environmental performance of mine facilities constructed on BLM-administered lands.

Uranerz Response:

Many of the details for a quality assurance plan are contained within the POO therefore a supplemental document has been developed summarizing those aspects. The quality assurance and control plan supplement is included in this submittal.

5.) Interim Management Plan:

Uranerz indicated in their response that they would create an alternative schedule if/when one becomes necessary (such as a 24 month projected work stoppage). An Interim Management Plan is a 43 CFR 3809.401(b) requirement that is to outline procedures that will be followed during times of temporary non-operation, both planned and unplanned. A permanent cessation of lixiviant injection is one possible period of temporary non-operation, but it is not the only scenario that needs to be addressed.

Uranerz Response

ISR operations objective is to produce and therefore does not employ interim periods of non-operations, unlike CBNG who may ‘shut-in’ wells for several months. As previously explained, the NRC License SUA-1597, condition 10.9 requires that Uranerz maintain an inward hydraulic gradient (cone of depression) in each of the individual production areas, starting when lixiviant is first injected into the production zone and continuing until restoration has been achieved.

Uranerz remains therefore, in some phase of operations at all times whether its production or restoration. Even when various infrastructures require specific attention, operational processes continue. As discussed, should a well or header house require maintenance, repair, replacement, only that item is removed from service long enough to complete the task and re-initiate service. For example, a well maybe shut off for servicing but the surrounding wells would remain operational. Likewise, should a header house require repairs, that header house would be taken offline but the remaining header houses would remain operational to ensure the cone of depression is seamlessly maintained as required.

In addition to the components identified above which are necessary for a complete Mine POO, additional operational and baseline environmental information would facilitate BLM’s National Environmental Policy Act (NEPA) analysis (43 CFR 3809.401(c)). Analysis of impacts cannot be conducted with any certainty using the general layouts and information provided. Please note that in addition to the information listed below, there may be other information needed as the NEPA analysis proceeds. The format for the first section below again follows the 43 CFR 3809.401(b) listing.

2) Description of Operations:

i. Maps

The map legend for a map included in the deficiency response package (Exhibit D5-b, “Subsurface Geology Map”) indicates ”Tertiary Fort Union, Lego Shale Member” – it should be “Lebo Shale Member.”

Uranerz Response:

Uranerz acknowledges BLM’s comment and has revised the map with the corrected title in the legend.

ii. Preliminary designs:

- a. In the operating plans, please indicate how human waste will be handled during operations, interim management, reclamation, and post-closure management phases.

Uranerz Response:

Domestic liquid wastes generated from restrooms and lunch facilities are considered non-byproduct materials and will be disposed of via a septic system that meets county and state requirements. The septic system will be separate from other liquid waste lines. These processes will be implemented from operations through termination of project, or until those facilities are slated for decommissioning.

- b. Please include information regarding the possibility of 3rd party toll milling of uranium-loaded resin. The present proposal is for processing to occur at Nichols Ranch. However, given that uranium-loaded resin from the Nichols Ranch is presently being toll milled at Cameco's Smith Ranch-Highland facility, 3rd party toll milling is a likely possibility for the Hank Unit.

Uranerz Response:

Uranerz will be transporting uranium loaded resin from Nichols Ranch to Smith Ranch-Highland Uranium Project located in Converse County where the uranium is stripped from the resin and processed. The same transport routes will be used as discussed in the POO. Once the uranium has been removed from the resin, the resin will be transported back to Nichols Ranch for re-use. This arrangement will occur until such time as drying/packaging facilities are equipped at the Nichols Ranch Central Processing Plant. Should the Hank Unit production areas start-up prior to implementation of onsite drying/packaging facilities then loaded resin will potentially be shipped off-site for 3rd party toll milling. Discussion of these activities will be addressed in the pending EA.

- c. Please address surface conflicts with oil and gas (including CBNG) development and existing operations in the area.

Uranerz Response:

Uranerz and several oil and gas (including CBNG) operations have been in contact to discuss and coordinate activities to not only ensure environmental protections but also plan for personnel safety.

iii. Water management plan:

There may be potential conflicts for the Hank Unit's proposed deep disposal well into the three indicated formations (Teckla, Teapot, and Parkman). A number of oil and gas wells in the area are producing from the Parkman, Shannon, Turner, and Frontier Formations. Several existing disposal wells in the area inject into the Lance Formation. What are the anticipated effects/conflicts with these other uses? Also, please indicate that, once the information is finalized, BLM will be informed of the legal description, selected formation, and depth for the deep disposal well.

Uranerz Response:

As previously discussed, WDEQ-WQD is the regulating and permitting agency for this feature and Uranerz has addressed these types of concerns within the context of the deep disposal well application. In the area around the Nichols Ranch ISR Project, the oil/gas wells are currently producing/injecting in the Shannon Formation. Additionally, the Shannon, Turner and Frontier Formations lie below the targeted zone; however it is anticipated that there will be no effects/conflicts between the industries since there is a

minimum of 300 ft. of mudstones and impermeable shales separating the proposed activities from oil/gas production zones below the Parkman at the Hank Unit. In regards to CBM, the CBM wells have their casings cemented to the surface, so no interference, water loss, or water invasion is anticipated. With regard to other deep disposal wells in the Lance formation, these wells are located several miles away and several thousand feet above from where the Nichols Ranch ISR Project deep disposal wells are located. With our current pending deep disposal well application, Uranerz will be approved for injection based on cone of influence and area of review calculations to avoid overlap concerns. As stated previously, Uranerz will notify BLM of the approved deep disposal well including legal description, formations, depth etc.

3) Reclamation Plan

iii. Mine reclamation:

When finalized, please inform BLM of the name and location of the approved NRC licensed disposal facility at which radioactive waste, including contaminated buildings and equipment, will be disposed.

Uranerz Response:

Uranerz had committed in the first round of responses to informing BLM of the disposal facility upon finalization. For clarification of commitment, the BLM will be provided the name and location of the contracted facility once the contract has been finalized.

v. Wildlife habitat rehabilitation:

Please provide more detail regarding how Uranerz will ensure/provide for wildlife habitat rehabilitation.

Uranerz Response:

As stated in Section 3.0 of the Reclamation Plan in the POO, “all lands disturbed by the mining project will be restored to their pre-mining land use of livestock grazing and wildlife habitat.” A successful reclamation plan starts with detailed planning before mining or reclamation operations begin and Uranerz has presented baseline information and a detailed reclamation plan in the POO. Specifically, in Appendix D8 vegetation, Uranerz has collected baseline vegetation information in accordance with WDEQ/LQD regulations and guidelines and this information is presented in Appendix D8 of the POO. The vegetation information was used to establish post-reclamation vegetation standards that will be used during the bond release process of the project. Additionally, in Section 3.12 of the Reclamation Plan in the POO, Uranerz presents detailed procedures how topsoil will be salvaged from all disturbed areas before construction and mining operations begin. The topsoil handling plan will be conducted based on the detailed soil maps presented in Appendix D7 of the POO. Once mining, restoration and decommission operations have been completed, Uranerz will remove all facilities as discussed in Sections 3.1 and 3.2 of the Reclamation Plan. Topsoil will then be replaced and Uranerz will conduct vegetation practices as outlined in Section 3.6 of the Reclamation Plan. Vegetation practices will include seeding and mulching all disturbed areas with seed mixtures that were approved by the WDEQ/LQD and the landowners (including the BLM and private parties). It is these seed mixtures that will allow the disturbed areas to ultimately be restored to suitable livestock and wildlife habitat. Uranerz will also undertake management activities (interseeding, control of livestock, and weed management) to promote successfully reclamation.

In accordance with the *Environmental Quality Act* (Wyoming State Statute Title 35 Chapter 11 et seq.), Uranerz is required to maintain and post a reclamation bond throughout the life of the project. In addition, after ISR operations have been completed WDEQ/LQD will retain a portion of the reclamation bond equal in the amount needed to ensure vegetation success for a period of not less than 5 years after all decommissioning and vegetation operations have been completed. Prior to obtaining final reclamation bond release from WDEQ/LQD, Uranerz will conduct detailed vegetation surveys and these results will be used to demonstrate that the reclamation standards established during pre-ISR operations by WDEQ/LQD were successfully met. If the vegetation standards are not initially met, Uranerz will wait additional time or conduct supplemental or remedial reclamation activities (including interseeding operations, etc.) so to promote the establishment of suitable livestock and wildlife habitat. Ultimately, the final reclamation bond will not be released until the vegetation standards have been met and once again all disturbed lands are available for livestock grazing and wildlife habitat.

Additionally, the reclamation bond is reviewed and approved annually by WDEQ/LQD and this bond will ensure that adequate financial resources are available to complete all reclamation operations should Uranerz fail to complete reclamation operations presented in the POO. If Uranerz fails to complete the reclamation plan and meet the reclamation goals outlined in the POO, WDEQ/LQD will secure the reclamation bond and ensure that all reclamation operations are completed in accordance with the approved reclamation plan. Uranerz anticipates and plans that it will successfully and fully implement the approved reclamation plan thereby ensuring successful rehabilitation of wildlife habitat for all disturbed lands within the permit area.

The procedures discussed above and presented in the POO provide detailed information how Uranerz will ensure reclamation of livestock and wildlife habitat.

4) Monitoring Plan

Uranerz has indicated that domestic and stock wells located within 1 kilometer of the production area monitoring ring wells will be sampled “after the commencement of uranium recovery operations.” How will Uranerz ensure that adequate baseline information (pre-mining) is obtained?

Uranerz Response:

Baseline data was required to be collected and analyzed prior to submitting the permit or license application to the WDEQ and NRC. The baseline data and analysis was submitted with the application and is included in the various appendices of the Plan of Operations. The baseline information has since been reviewed and approved by the WDEQ and NRC and the permit and license issued.

Wildlife:

1. Eagle roosts and raptor nests:

The deficiency response committed to a timing limitation for eagle roost sites and raptor nests. Both eagle roost sites and raptor nests are present within the Hank Unit. Due to the proximity of the ore body to nests and roosts, please provide further detail regarding the types of activities that will, or will not, occur during the restricted periods in order for the BLM to conduct an accurate analysis of impacts.

Uranerz Response:

As indicated in Uranerz earlier response, Uranerz will minimize potential impacts to bald eagle nests and communal roost occurring at the Hank Unit, Uranerz will implement the following mitigation measures.

- A. A seasonal minimum disturbance-free buffer zone of 1 mile will be established for all bald eagle winter roost sites (November 1 – April 1). Identified bald eagle winter roosts are show on Figure 1. These buffer zones and timing may be adjusted based on site-specific information through coordination with, and written approval from, the USFWS.
- B. Within 0.5 mile of bald eagle winter roost sites additional measures such as remote monitoring and restricting maintenance visitation to between 9:00am and 3:00pm are necessary to prevent disturbance (November 1 – April 1). Identified bald eagle winter roosts are shown on Figure 1.

As indicated in Mitigation Measure A, Uranerz will not conduct any ground-disturbing activities within the 1 mile buffer area. Uranerz will schedule initial construction operations (i.e., ground disturbing activities) to occur outside of the November 1 – April 1 timing restriction. However, the buffer zones and timing may be adjusted based on site-specific information through coordination with and written approval from the USFWS and the BLM.

Additionally, as indicated in Mitigation Measure B and in accordance with BLM policy concerning Title 43 of the Code of Federal Regulations, Part 3800 (or 43 CFR 3800), “Mining Claims Under the General Mining Laws,” on-going and required maintenance, repair/replacement activities (such as mechanical and electrical system repairs for wells, pumps, header houses, and piping systems, etc.) that do not involve ground disturbance will be conducted on a 24-hour per day 365 day per year basis. Generally normal routine maintenance activities can and will be performed between 9:00 am and 3:00 pm from November 1 - April 1 for areas located with 0.5 mi of the bald eagle winter roost sites. However, because of the nature of ISR operations, there may be some unplanned routine maintenance, and repair/replacement activities that cannot be conducted within the aforementioned window which must be addressed immediately (within hours) in accordance with WDEQ-LQD and NRC regulations in order to maintain the integrity of the ISR operation and to protect public safety. For example, if electrical issues arise in the wellfield with either a well or header house during the evening shift, personnel are responsible to respond (maintenance or repair) to ensure wellfield conditions are sustained. These unplanned activities can and do occur during the normal course of continued operations. Given the continuous nature of ISR operations and NRC regulations, Uranerz will comply with these mitigation measures to the best of their ability.

2. Greater sage-grouse:

In order to provide protection to nesting sage-grouse, BLM requests compliance with BLM IM 2012-19 (2012): “Sage-grouse nesting/early brood-rearing habitat outside core or connectivity areas: Surface disturbing and/or disruptive activities are prohibited from March 15 – June 30 to protect sage-grouse nesting and early brood rearing habitats within 2 miles of the lek or lek perimeter of any occupied lek located outside core or connectivity areas. Where credible data

support different timeframes for this restriction, dates may be expanded by 14 days prior or subsequent to the above dates.”

Uranerz Response:

As indicated in Uranerz earlier response, Uranerz will minimize potential impacts to greater sage-grouse (a candidate species) that occur near the Hank Unit by implementing the following mitigation measures.

- A. Surface disturbing activities or surface occupancy is prohibited or restricted on or within one quarter (0.25) mile radius of the perimeter of occupied or undetermined greater sage-grouse leks.
- B. Disruptive activity is restricted on or within one quarter (0.25) mile radius of the perimeter of occupied or undetermined greater sage-grouse leks from 6 pm to 8 am from March 15-May 15.
- C. A sage-grouse lek survey will be conducted annual for all known leks within 2 miles of the Hank Unit project boundary by a biologist following the most current WGFD protocols. All survey results will be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.

Uranerz is aware of the provision of BLM IM 2012-19 and will comply with the previously submitted mitigation measures. These mitigation measures comply with BLM IM 2012-19 and are consistent with the locatable mineral provisions of Title 43 of the Code of Federal Regulations, Part 3800 (or 43 CFR 3800), “Mining Claims Under the General Mining Laws,” and especially important is Subpart 3809 “Surface Management” (or 43 CFR 3809 et seq.). Under these regulations operators are required to take such action as may be needed to prevent adverse impacts to federally-listed threatened or endangered species and their habitat which may be affected by operations. To that end, Uranerz has complied with this requirement. The mitigation measures presented above will minimize potential impacts of mining operations to the extent possible on greater sage-grouse (a candidate species) as required by the BLM.

As previously discussed, the Hank Unit ISR project area is located outside of core greater sage-grouse habitat or any connectivity areas. Uranerz will operate the Hank Unit ISR project area to the extent possible in such a way as to limit any potential impacts to nesting and brood rearing greater sage-grouse. To the extent possible, Uranerz will minimize surface disturbance in suitable greater sage-grouse nesting and early brood rearing habitats that may be impacted. In other words, Uranerz will not disturb any more land than is absolutely necessary for the proposed project. In addition, Uranerz would also attempt to minimize surface disturbance to suitable greater sage-grouse nesting and early brood rearing habitats from March 15- June 30. However, during the construction phase of the project it is likely that some construction activities may occur in suitable greater sage-grouse nesting and early brood rearing habitats from March 15 - June 30. These construction activities will be limited to a maximum of approximately 105 acres of disturbance to sagebrush shrubland habitat within the Hank Unit ISR project area. However, once construction operations have been complete no additional disturbance will occur. In addition, at the completion of ISR operations, all disturbed areas will be revegetated and greater sage-grouse nesting and early brood rearing habitat will eventually be reestablished.

3. Overhead power lines.

From the deficiency response, please clarify the phrase “where practical” for our NEPA analysis.

Uranerz Response:

The term “where practical” refers to physical limitation of Uranerz’s ability to install a buried power line within the Hank Unit ISR project area. In some specific locations, a geologic condition (e.g., rock outcrop) or topographic feature (e.g. incised drainage) may prevent Uranerz ability to physically install a buried power line. In these situations, Uranerz will install aboveground power poles to span the specific conditions or feature.

4. Migratory Birds.

From the deficiency response, please clarify the term “minimize.” Specifically, is surface disturbance planned during the nesting season (April 1 – July 1)?

Uranerz Response:

To the extent possible, Uranerz will minimize surface disturbance that may impacted nesting migratory birds. This means that Uranerz would minimize surface disturbance between April 1 and July 1 by trying to schedule construction activities outside of this timing window. However, during the construction phase of the project it is likely that some construction activities may occur from April 1 – July 1. The exact timing of the construction activities cannot be exactly determined but these construction activities with approximately 117 acres of total disturbance within the two production areas. Once construction operations have been complete no additional disturbance will occur. At the completion of construction operations, areas not required for on-going operations (e.g., most of the wellfield, utility corridors) will be temporarily revegetated thereby creating some temporary habitat for nesting migratory birds. In addition, at the completion of ISR operations, all disturbed areas will be permanently revegetated and nesting habitat for migratory birds will eventually be established.

Cultural:

The BLM has not received the visual contrast ratings for the traditional cultural properties (48CA268, 48CA6148, 48CA6748, 48CA6751, and 48CA6753).

Uranerz Response:

The visual contrast ratings for the traditional cultural properties are currently being conducted and will be submitted to the BLM under separate cover upon completion.

Not indicated in deficiency response letter:

Please update the information in Table E-1, p. E-1, “Permits and Licenses for the Nichols Ranch ISR Project.” Please correct the “BLM Drilling Permit” entry as follows: “BLM Notice of Intent (for conducting exploration)”; “In Possession, WYW-169662.” Please add to that table this pending approval: “BLM Plan of Operations”, “BLM”, “Pending, WYW-169904.”

Uranerz Response:

Uranerz has revised and updated Table E-1, p. E-1. The revised table is enclosed along with insertion instructions.

Pictorial Examples of ISR Wellfields and Facilities



Photo 1: Typical In-Situ Recovery Operation and Wellfield – Aerial View



Photo 2: Typical Wellfield Layout and Infrastructure



Photo 3: Example of Wellfield and Access Roads



Photo 4: Typical Wellfield Header House



Photo 5: Example of Headerhouse and wellfield

Uranerz Quality Assurance Plan (Supplement)

A quality assurance/quality control (QA/QC) plan is a critical component in the Plan of Operations (POO) to ensure the environmental performance of operational facilities constructed on BLM lands. The QA/QC program provides for all environmental monitoring, facility construction, and operations (including restoration). The NRC and WDEQ-LQD require that QA/QC programs be established for ISR projects as part of the permitting and licensing requirements. The quality assurance program will be implemented consistent with NRC Regulatory Guide 4.15 “Quality Assurance for Radiological Monitoring Programs (Normal Operations) – Effluent Streams and the Environment”, Revision 1, 1979. Components of the QA/QC program include:

- Organizational structure and responsibilities of personnel charged with ensuring adherence to procedures and programs. The management organization is described in Section 3.14.1 of the POO.
- Established qualifications of personnel responsible for quality activities, Section 3.14.4.
- Written operating procedures (Section 3.14.2.1.1) or instructions in place for all activities related to operations.
- Record maintenance required by NRC and LQD; the details of which are found in Section 3.14.2.1.3 and 3.17.3.
- Inspections to review and verify compliance and conformance with regulation and company policy. Inspections are described in Sections 3.14.3.2 and 3.19.5 of the POO.
- Sampling and laboratory quality control is discussed in Section 3.17.4 and 3.17.5 respectively.
 - Review and analysis (verification) of data along with computational checks (validation) are provided in Section 3.17.6 and 3.17.7.
- Audits to review quality assurance is described in section 3.17.8
- Corrective action provisions are provided in Section 3.17.7. Additionally, activity specific corrective actions are described throughout the POO.
- An example would be Well Mechanical Integrity Testing (MIT). Per WDEQ-LQD Chapter 11 wells are required to be MITd. Uranerz has provided an extensive description in the POO Section 3.6 aligning to the regulation. Additionally, the procedure is provided in Addendum MP-D of the Mine Plan Volume V in the POO. All MITs performed are recorded, reviewed and reported periodically to both the NRC and WDEQ-LQD for review. Periodic reports consist of MIT results and any necessary corrective action (either repair or plug and abandonment).

Uranerz has incorporated quality assurance plans related to activities performed during operations in the POO to minimize impacts to the environment. These activities can be summarized into the following topics:

- Facility Construction, Operations, and Controls

- Monitoring/Sampling

Facility Construction, Operations and Controls

ISR facilities and activities are subject to heavy regulatory oversight. The regulatory entities include but are not limited to WDEQ, NRC, OSHA, BLM, EPA, and DOT. The following references are the some of the regulatory standards upon which the permit and license are attached to:

- Wyoming Statutes Title 35, Chapter 11 and related WDEQ-LQD Non Coal Rules and Regulations
- NRC License SUA-1597 attached to Title 10, Code of Federal Regulations, Chapter 1, Parts 19, 20, 30, 31, 34, 35, 36, 39, 40, 51 70 and 71.
- DOT regulations Title 49, Code of Federal Regulations Parts 100-185
- OSHA 1910 and 1926 regulations

These standards regulate many of main aspects of the project from baseline sampling and construction/operation of facilities to safety plans, training, transportation, and effluent controls in additions to all restoration activities.

Personnel are trained to the procedures, policies and quality assurance plans for the various activities detailed in the permit and license, as required. These activities are documented to demonstrate compliance with regulatory standards and conformance with company policy. Records and reports pertaining to these activities are documented for the entirety of the project in accordance with regulatory requirements and are subject to periodic review, both internal and regulatory, for compliance and conformance. Corrective actions resulting from activities are also resolved, maintained, tracked, documented and reported as necessary.

Monitoring/Sampling

Various types of monitoring and sampling are collected before, during and after production. Baseline (pre-operational) characterization has been completed for the Hank Unit and has been approved by the WDEQ-LQD, and NRC. The types of samples collected consist of water, air, soils, vegetation, noise, wildlife, etc. The data was analyzed as required by WDEQ-LQD Non-Coal Rules and Regulations and NRC Guidelines and has been approved with the issuance of permits and licenses.

Operational monitoring is sampled for, and similar to the baseline monitoring, again in adherence to WDEQ-LQD and NRC regulations. This monitoring consists; however, of monitoring facilities and processes in addition to the environmental monitoring. Sampling continues through restoration and until the activity is no longer required as approved by regulatory agencies.

INDEX SHEET FOR PLAN OF OPERATIONS REVISION INSERTION

Page 1 of 1
Date May 11, 2012

MINE COMPANY NAME: Uranerz Energy Corporation MINE NAME: Nichols Ranch ISR Project PERMIT NO.: 778

Statement: I, Mike Thomas, an authorized representative of Uranerz Energy Corporation declare that only the items listed on this and all consecutively numbered Index Sheets are intended as revisions to the current permit document. In the event that other changes inadvertently occurred due to this revision, those unintentional alterations will not be considered approved.

NOTES:

- 1) Include all revision or change elements and a brief description of or reason for each revision element.
- 2) List all revision or change elements in sequence by volume number; number index sheets sequentially as needed.

VOLUME NUMBER	PAGE, MAP OR OTHER PERMIT ENTRY TO BE REMOVED	PAGE, MAP OR OTHER PERMIT ENTRY TO BE ADDED	DESCRIPTION OF CHANGE
Volume II	Exhibit D5-b	Exhibit D5-b	Please remove the original exhibit from Volume II and replace with the new update exhibit into the plastic sleeve.
Volume V	Table E-1, pg. E-1	Table E-1, pg. E-1	Table has been updated and revised per BLM comment to include corrected document numbers and BLM Plan of Operation.

E.1 PERMITS AND LICENSES REQUIRED FOR THE NICHOLS RANCH ISR PROJECT

Various state and federal permits and licenses that are needed or are in-hand for the Nichols Ranch ISR Project are listed in Table 10-1. Prior to the start of mining (the injection of lixiviant into the ore zone aquifer), Uranerz Energy Corporation will have obtained all the necessary permits, licenses, and approvals required by the Wyoming Department of Environmental Quality and the Nuclear Regulatory Commission.

Table E-1 Permit and Licenses for the Nichols Ranch ISR Project.

Permit, License, or Approval Name	Agency	Status
Source Material License	NRC	In Possession SUA-1597
Permit to Mine	WDEQ-LQD	In Possession – No. 778
Permit to Appropriate Groundwater	SEO	Existing wells are approved, new well permits will be filed prior to drilling
DEQ Drilling Permit	WDEQ-LQD	In Possession, No. 336DN-TFN 4 5/276
BLM Notice of Intent (for conducting exploration)	BLM	In Possession, WYW-169662
BLM Plan of Operations	BLM	Pending, WYW-169904
Wellfield Authorization Permit	WDEQ-LQD	In Preparation
Deep Disposal Well Permits	WDEQ-WQD	In Preparation
WYPDES	WDEQ-WQD	In Possession WYR104331
11(e)2 Byproduct/Waste Disposal Agreement	N/A	In Preparation
Pemit to Construct Septic Leach Field	County	In Possession, Johnson County
Air Quality Permit	WDEQ-AQD	In Possession CT-8644

Notes: NRC - Nuclear Regulatory Commission

WDEQ-LQD - Wyoming Department of Environmental Quality Land Quality Division

WDEQ-WQD - Wyoming Department of Environmental Quality Water Quality Division

WDEQ-AQD - Wyoming Department of Environmental Quality Air Quality Division

SEO - State Engineer's Office

BLM - Bureau of Land Management